

ABSTRACT

A new method is provided for the removal of liner oxide from the surface of a gate electrode during the creation of the gate electrode. A layer of gate oxide is formed over the surface of a substrate, a layer of gate electrode such as polyimide is deposited over the layer of gate oxide. The gate electrode and the layer of gate oxide are patterned. A layer of liner oxide is deposited, gate spacers are formed over the liner oxide, exposing surfaces of the liner oxide. The created structure is nitrided by a plasma stream containing  $N_2/H_2$ , reducing the etch rate of the exposed liner oxide. The liner oxide is then removed by applying a wet etch, contact regions to the gate electrode are salicided.